

# **Canopy Tourism: Concept and Practices in the Indian Context**

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# **Forms of canopy tourism**

## **1. Canopy Walkways**

Canopy walkways are bridges between and in the canopy of a forest; mostly linked up with platforms inside or around the trees.



### **Mangrove Canopy Walkway, Baratang, Andamans**

- The “walk” includes 240 metres long bamboo bridge, through thick mangroves.
- No mangrove branch pruned nor any tree felled during the construction of the path.
- Tourists are acquainted with various aspects of mangroves, its morphology, salt water adaptations and its services while walking on this path

# Forms of canopy tourism

## 2. Elevated Walkways

Walkways built across the canopy at different levels so that tourists are able to get a close look at the canopy from the walkways at different heights.



**Elevated walkway at Thenmala, Kerala**



# Forms of canopy tourism

## 3. Tree Houses

- Tree Houses are houses constructed in the trees just below the canopy.
- Tribal communities, Kerala used to construct houses in trees- to protect from animals.
- Tree houses for tourists were modelled on original tree houses.



Tree house, Waynad

# Forms of canopy tourism

## 4. Zip Line

- Pulley suspended on a cable mounted on an incline.
- The user is propelled by gravity to traverse from the top to the bottom of the inclined cable, made of stainless steel, by holding on / attaching to the freely moving pulley.
- Other names - flying fox, zip wire, aerial runway, aerial rope slide, death slide or tyrolean crossing



**Flying Fox**

# Forms of canopy tourism

## 5. Aerial Ropeways

- An arrangement of overhead cables suspended from towers and supporting travelling buckets used for transporting people, over rough terrain.
- Similar to “sky trams”- high technology cableway that gives the opportunity of intermediate ride with short stops to observe the cloud forest biodiversity.



**Ropeway to Mansa Devi Temple,  
Haridwar, Uttarakhand**



**Sky tram at Monteverde**



# Canopy tourism and its linkages to Ecotourism

## Conservation

- Natural resources and biodiversity.
- Rational utilisation of resources: land, water, conventional & non-conventional energy.
- Cumulative impact assessments

Infrastructure heavy, requires high investment thus mass tourism necessary –financial viability.

- Dehradun-Mussoorie ropeway is expected to cost Rs.800 crores.



# **Canopy Tourism and its linkages to Ecotourism**

## **Community participation & benefit sharing**

- Involvement of local communities in planning, implementation and monitoring.
  - understanding projects
  - plan tourism in line with traditional customs, practises and governance.
  - channeling benefits to local community

In canopy tourism, participation & benefit sharing is limited due to scale of operation of project.

# **Canopy Tourism and its linkages to Ecotourism**

## **Institutional mechanisms**

- Multi-stakeholder platform (local communities, panchayats, tourism industry & government) to regulate tourism in existing laws and regulations-make project sustainable.
- Create space for discussion on
  - objectives of tourism development
  - benefit sharing mechanisms
  - monitoring mechanisms
  - addressing people's concerns
  - decision making

# **Canopy tourism and its linkages to Ecotourism**

## **Education & Interpretation**

- Educating tourists about fragile ecosystems and their links to lives of local communities.

Canopy Tourism has the scope to educate tourists on the importance of the canopy and enjoy nature in a more environmentally sensitive manner.

# Case Studies



**Elevated Walkway at Thenmala, Kerala**



# **Elevated Walkway at Thenmala, Kerala**

## **Features**

### **History**

- Started in 2002 - Thenmala Ecotourism Promotion Society, Government of Kerala.
- Land was reserve forest earlier.

### **Technical details**

- Total Length of walkway: 120 metres connecting 11 trees
- Maximum elevation point: 21 feet.
- Supported by 11 reinforced concrete pillars.
- Steps and platforms are made of large quantity of wood – 'Kambakam'.
- Cost: Rs.25 lakhs.

### **Tourism**

- 25,000 tourists (approximately) per year. Not uniform and during certain holidays, the number exceeds 250 tourists per day.
- All the trees in the zone are named to help the tourists identify the trees.
- Entry charges: Rs.20 – Adults, Rs.10 – children.

# **Elevated Walkway at Thenmala, Kerala**

## **Concerns**

- Tourist number at some points of time goes beyond 50, making it unsafe.
- Excessive number of tourists limit the scope for enjoying the canopy peacefully and limits understanding of ecosystem.
- No participation of local community in the project.

## **Impacts**

- Nesting of birds has reduced.
- Behavioural change in the monkeys with tourists feeding them. Monkeys snatch food items from tourists.

# **Tree Houses at Wayanad, Kerala**



**Jungle Park, Green Magic-1**

# Jungle Park, Green Magic-1

## History

- Started in late 90s.
- Adapted from the tribals building huts in trees to keep safe from elephants.

## Technical details

- The property has two tree houses.
- Tree houses constructed in a coffee and cardamom plantation areas.
- Certain types of trees- 'Koli' are selected for the construction of tree houses due to their strength.
- Tree houses are at a height of 90 feet and 135 feet.
- Cost of the construction between Rs.15-20 lakhs.

## Tourism

- Visitor profile: 95% foreigners.
- Needs 5 to 6 support staff in addition to ground infrastructure like kitchen, restaurant etc.
- Financial viability is higher as it is a part of a conventional resort.
- High maintenance – Platforms, ropes, water bags -lift system.
  - Maintenance cost high as everything has to be carried from town (Vythri) to the resort and then from the base of the tree to the top.
  - Location is very remote and the road access to be maintained.
- Element of risk - tourists prohibited from drinking and children are not allowed, prohibition on smoking – fire.



# **Jungle Park, Green Magic-1**

## **Concerns**

- No element of education or interpretation about the canopy ecosystem or flora and fauna.
- Participation of local community is limited to construction of tree huts and maintenance.

# Tree house at Vythiri Resort



# Tree house at Vythiri Resorts

## History

- 2008 – Constructed.
- Demand for tree houses as the Jungle Park Resort was closed down for some time.
- 2 tree houses were constructed within a span of 4 months

## Technical details

- Investment: around Rs.35 lakhs.
- Area: 150 acres, resort area 30 acres and rest is plots and plantations.
- Tree houses built at heights of 90 feet and 60 feet.

## Tourism

- Tourist profile: 95% foreigners.
- Charges: Rs. 12000 per day - Expensive to stay.
- Occupancy rate: 300 days per year.
- Tree house needs 6 support staff to serve the guests.
- Tourists are taken for morning and evening trails and naturalist accompanies them.
- High maintenance - every year the bamboo roof and bamboo ply require changing and repainting.
- Element of risk
  - Prohibition on Liquor, smoking.
  - Children below 12 not permitted.

# Tree house at Vythiri Resorts

## Concerns

- No element of education or interpretation about the canopy ecosystem.
- Participation of local community limited to construction and maintenance of tree huts.



Tree house, Vythiri Resorts



# Analytical view of case studies

- High investment models – around Rs. 25 lakhs.
- Negative impacts on fauna- Decrease in nesting habitats and change in animal behaviour
- Unsustainable models- No element of conservation due to high requirement of natural resources.
- Limited Education and interpretation component
  - Scope for peaceful watching and understanding canopy is limited in elevated walkway.
- Community participation and benefit sharing mechanisms are missing.
- Absence of institutional mechanisms:
  - Lack of a multi-stakeholder platform to regulate tourism impacts and to address people's concerns.

# Recommendations

- Ensure constructions as per existing legislations and building norms.
- Ensure community participation either through employment, sustainable local sourcing of raw material that contributes to local economy.
- Measure cumulative environmental impacts of new projects in ecologically sensitive areas.